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Insert: Pac Rim registration form

## GROWING AREA NEWS

### Oil Spill Closes Port Madison to Shellfish Harvesting

Shortly after midnight on December 30<sup>th</sup>, about 4,600 gallons of fuel oil spilled into Puget Sound at Chevron's fuel terminal in Edmonds. Despite efforts to capture the oil, by the next day it landed on a beach just east of Indianola in Port Madison Bay. Our office immediately closed the beach and nearby offshore geoduck tracts to harvest, and the Kitsap County Health District posted shellfish closure signs at public accesses. Efforts to remove the oil from the beach began immediately and after three months, most of the oil is now gone.

Our office has two tasks. First, since there are no federal or state health standards related to the concentration of hydrocarbons in shellfish, we have to determine the maximum contamination level allowed. Second, we need to evaluate the shellfish samples to assure that all species present (manila clams, butter clams, cockles, horse clams, and geoducks) are safe to eat. Sampling the intertidal species will not occur until the clean-up activities on the beach are completed. Samples of geoducks from the offshore tracts have been collected and are now being analyzed.

A number of organizations are involved in the shellfish issues, including the Suquamish Tribe, Kitsap County Health District, DNR, Ecology, NOAA, Entrix Inc., and the FDA. For more information, contact Bill Cleland at (360) 236-3306 or e-mail [bill.cleland@doh.wa.gov](mailto:bill.cleland@doh.wa.gov).

Aerial photo of Point Wells, where spill occurred, taken on 12/30/03. An oil containment boom is already in place.

*Photo courtesy of  
Washington State  
Department of  
Ecology (Dick Logan)*



Cleanup activities at Madison Marsh, which was hard hit by the spill (photo taken 1/5/04). For more information on cleanup efforts, visit Ecology's web site at [www.ecy.wa.gov/programs/spills/spills.html](http://www.ecy.wa.gov/programs/spills/spills.html)

*Photo courtesy of National  
Response Corporation (NRC)  
Environmental Services, Seattle  
(Ross McDonald)*

## GROWING AREA NEWS *(continued)*

### Norovirus Outbreaks Related to Washington Oysters

Raw oysters from Samish Bay and Hammersley Inlet caused two separate outbreaks of norovirus illnesses in November and December. Norovirus may be the most common cause of food-borne illnesses in the U.S. A typical infection causes vomiting and diarrhea for 1-2 days. It is extremely infectious. People sick with norovirus can excrete millions of viruses in their vomit and stools, but it only takes a few viruses to make someone sick.

The illnesses related to **Samish Bay** oysters were reported to us on November 20<sup>th</sup> by Public Health of Seattle and King County. They determined that raw oysters, harvested November 4-6, were the common link in 19 illnesses from four Seattle restaurants. As a result, we closed Samish Bay to harvest and asked harvesters to recall all shellfish harvested after November 4. Shellfish had been shipped to 17 states and 4 foreign countries.

During the next few weeks, the Skagit County Health Department worked with our staff to examine the shoreline and uplands of Samish Bay to try to discover the source of the viruses. Water and shellfish samples were collected. We were unable to identify any direct discharges of sewage to the bay, however, several potential sources were identified that may have contributed to the illness outbreak. These included liveaboard boats moored in the Samish River, a few questionable on-site sewage systems, and a large number of salmon fishermen on the banks of the Samish River with limited access to toilet facilities. On December 11<sup>th</sup>, after determining there were no active discharges of sewage to the bay, we reopened Samish Bay.

**Hammersley Inlet** oysters were implicated in a similar norovirus outbreak that occurred in Portland. In this case, a local health department determined that raw oysters served at a party were the source of the illnesses. Everyone who ate the oysters became ill, those who didn't eat the oysters didn't get sick. On December 24, we closed part of Hammersley Inlet and asked the commercial shellfish operations to recall all shellfish harvested between December 8 and 24<sup>th</sup>. We surveyed the area for pollution sources and collected water samples in an attempt to identify the source of the contamination. A source of the contamination was not identified. On January 13<sup>th</sup>, following the completion of the investigation, the closed portion was reopened.

In both Samish Bay and Hammersley Inlet, we had excellent cooperation from the licensed operations and the local health departments. In both cases, it's possible that just one sick person improperly disposing of their sewage or vomit contaminated the oysters that made everyone ill. For more information contact Bob Woolrich at (360) 236-3329 or e-mail [bob.woolrich@doh.wa.gov](mailto:bob.woolrich@doh.wa.gov).

### Sludge Disposal Causes Emergency Closure of Northern Oakland Bay

On January 15<sup>th</sup>, 2004, the Department of Ecology informed our office that the owner of a septic tank service had been placed under arrest for illegally disposing of sewage solids on his property. The property was immediately adjacent to Malaney Creek, a tributary of Oakland Bay. According to Ecology, puddles of sludge on the property were up to six inches deep and within 10-15 feet of the creek. Later that day, we closed the northern portion of Oakland Bay to give us time to evaluate the health threat.

According to records, more than 350,000 gallons of sewage solids may have been dumped on the property. The sewage solids appeared to be from three separate types of sources: digester solids from wastewater treatment plants, on-site septic tank pumpings, and sanikan wastes. All of these wastes contain human bacteria and viruses with the potential to cause a massive illness outbreak.



Before the discovery of this illegal disposal, in 2003 and in January of 2004, water samples were collected from Malaney Creek by the Mason County Health District, Squaxin Tribe, and our office. Relatively low levels of fecal coliform were recorded even after storm events. Examinations of the property by our staff did not reveal a direct connection from the sewage solids to Malaney creek. Water samples collected between January 15 and January 23 did not show contamination from the property.

By January 23<sup>rd</sup>, we were able to complete our investigation and reopen northern Oakland Bay. Mason County collected water samples in Malaney Creek upstream and downstream of the property twice a week for several weeks following the reopening to ensure that runoff was not contaminating the creek or Oakland Bay. For more information contact Frank Meriwether at (360) 236-3321 or e-mail [frank.meriwether@doh.wa.gov](mailto:frank.meriwether@doh.wa.gov).





## INSPECTORS' CORNER

### Warm Weather Transport

Spring is here, and the weather is beginning to warm up. It's time to be aware of bacterial growth that occurs when shellfish are not placed in a refrigerated truck or iced during transport. The requirements for transportation of shellfish are found in chapter IX in the 1999 National Shellfish Sanitation Program Model Ordinance.

Remember:

#### Shellfish shipments shall be considered acceptable upon arrival at a dealer when:

- shellstock is cooled to an internal shellstock body temperature of 50° Fahrenheit (10° Centigrade) or less; and
- shucked shellfish is shipped at a temperature of 45° Fahrenheit (7.2° Centigrade) or less.

#### The receiving dealer:

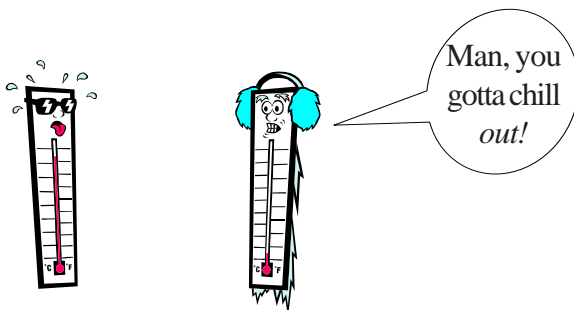
- shall ensure shucked shellfish are not permitted to remain without ice, mechanical refrigeration, or other approved means of maintaining shellfish temperature at or below 45° Fahrenheit (10° Centigrade).

#### Remember shellfish shall be rejected when:

- the internal shellstock body temperature exceeds 60° Fahrenheit (15.6° Centigrade) unless the harvest initiation time can be documented and indicates that the time from harvest has not exceed the time-temperature matrix found in Chapter VIII @ .03;
- shucked shellfish exceeds 50° Fahrenheit (10° Centigrade).

WAC 246-282-010, the Sanitary Control of Shellfish stipulates that "harvesters", by definition, must deliver shellstock within four hours of landing it to a dealer licensed by Washington State.

Any questions regarding the temperature requirements outlined in the National Shellfish Sanitation Program Model Ordinance should contact Richard Lillie, (360) 236-3313 or e-mail richard.lillie@ doh.wa.gov.



### Record Keeping and Recall Responses

Late last year Washington had instances of shellfish-associated illnesses that resulted in growing area closures and product recalls. In some cases, improperly kept or incomplete records hindered efforts to identify product that needed to be recalled and delayed notification to receiving states and countries.

The Model Ordinance requires that each dealer maintain accurate and legible transaction records that

- are sufficient to document that the shellfish are from an approved source;
- permit a container of shucked shellfish to be traced back to the specific incoming lot of shucked shellfish or shellstock from which it was taken; and
- permit a lot of shucked shellfish or a lot of shellstock to be traced back to the growing area(s), date(s) of harvest, and, if possible, the harvester.

Proper record keeping is a critical public health issue because it allows shellfish associated with an illness or outbreak to be quickly identified and traced back to its source. This allows the Department to quickly determine if the illness is associated with the growing waters and take timely action.

The Interstate Shellfish Sanitation Conference has recognized the importance of proper and accurate record keeping; the updated version of the Model Ordinance will contain a mandate that purchase and sales entries be made within 72 hours of the activity.



## INSPECTORS' CORNER *(continued)*

### Accuracy of Export Certificates

Companies who are requesting Export Certificates for shipping product to Asian countries are reminded of the requirements of Food Safety and Shellfish Programs Policy and Procedure #14, Export Certificates. The policy says in part:

- Changes to the original export certificate, with the exception of the weight, will invalidate the document.
- An authorized agent of the company must sign the certificate in the space indicated on or after the date of harvest. A copy of each signed export certificate must be sent to this office within five business days of export.
- Any certificate(s) not used must be marked "void-did not ship" and returned to this office within five business days of export.

Companies that are over two weeks in arrears with this requirement will not be issued any new export certificates until this requirement is met.

Any questions to the policy please contact Michalene Fontana, Export Certificate Coordinator at (360) 236-3330.

### Japan Export Requirements for Live Oysters



In December of 1996, the Japanese government approved the export of live oysters from Washington to Japan. Prior to granting approval, the Japan Ministry of Health and Welfare conducted an extensive review of our shellfish program, visited growing areas in the state, and required DOH to conduct additional water quality testing. The Japanese government requires a growing area to meet the *total coliform* standard instead of the fecal coliform standard that we currently use.

Because of the additional water quality requirement, each harvest site has to be tested before exports can begin and at least once a year after that. As a result, we can only issue export certifications for live oysters to companies that have met the testing requirement. If you are interested in shipping live oysters to Japan, please contact Jessie DeLoach at (360) 236-3302 or e-mail [jessie.deloach@doh.wa.gov](mailto:jessie.deloach@doh.wa.gov) to learn more about the approval process.

### HACCP Class Scheduled

This year's spring HACCP class for the industry and interested individuals will be held on April 29 and 30, 2004. We are changing the format somewhat this year to make the class even more interesting and informative. The class



will be held in Building 6, 7171 Cleanwater Lane, at our New Market Campus off Tumwater Boulevard in Olympia. Instruction will begin at 8 o'clock in the morning each day, and run until 5 o'clock in the afternoon. The cost of the class remains a bargain at seventy-five dollars per person. A registration form is included with this edition of *Shellfish Connections* (see page 7). The registration and payment deadline is April 19, 2004. If you have any questions, please contact Richard Lillie at (360) 236-3313 or e-mail [richard.lillie@doh.wa.gov](mailto:richard.lillie@doh.wa.gov).

### New Inspector Assignments

Have you had a new or different inspector recently assigned to your company? That's because Bob Ronning, who stepped into our vacant inspector position in September of last year, recently completed his inspector training and standardization and has joined our other inspection staff in full-time inspection duties. Having a full complement of inspection staff has allowed us to more evenly distribute companies assigned to each inspector. Although all inspectors are standardized to the same national standard, there may be a period of adjustment for both you and your new inspector as he or she becomes familiar with your company's operations.

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## BIOTOXIN UPDATE

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### Domoic Acid

#### First Quarter 2004

The domoic acid levels in razor clams for the first quarter of 2004 continued downward, following the trend from December 2003. The only site on the coast that tested above the closure level of 20ppm was Kalaloch, which had 21ppm and 28ppm in January and one sample at 28ppm in February. These test results prevented several planned razor clam openings at Kalaloch. Long Beach and Twin Harbors had three open razor clam harvest days in January and three in February. Finally, in March, Kalaloch had good test results and was open for three days of razor clam harvest. The plankton monitoring revealed almost no *Pseudo-nitzschia* cells present in the water in the first quarter of 2004. Domoic acid results in Dungeness Crab was so uneventful in the fall of 2003 that testing crab for domoic acid was stopped after December.

### PSP

#### First Quarter 2004

PSP toxin levels followed the typical pattern for the first quarter of the year, with downward trends throughout the state. In Puget Sound, no general closures were lifted in the first quarter of 2004 because 2004 started off with very few PSP closures in effect. 2003 was such a mild year for PSP few closures were needed and most were very short in duration. There were two geoduck tract closures in the first quarter of 2004. Port Gamble Tract #20000 closed in January and Jamestown Tract # 00450 closed in February. Both of these tracts were in areas impacted by PSP blooms in the fall of 2003. The 2004 closures were most likely related to these fall blooms, rather than new bloom activity.

For more information, contact Frank Cox at (360) 236-3309.

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## OTHER NEWS

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### New Recreational Shellfish Lead

Kim Zabel-Lincoln joined our office in early January as the program's Recreational Shellfish Lead, a position that has been vacant for over two years. Kim comes to us from Mason County Health Department with a Bachelors Degree in Environmental Science, and has extensive public health experience and educational background. Welcome to the team Kim!



### 2004 Pac Rim Conference

This year's Pacific Rim Shellfish Sanitation Conference is scheduled for May 26 and 27 in San Francisco. Agenda topics for this year's Conference include viral studies and investigations, microbial studies and source tracking methodology, bioterrorism, cadmium, and biotoxins, as well as state, tribal, and international updates.



The Conference was able to obtain reasonable room rates with the Canterbury Hotel in the heart of the city, so be sure to register early! A [registration form](#) is included with this newsletter.

### License Fee Restructure Efforts

Update to the article in our December 2003 newsletter: A second request for accurate acreages on harvest sites was mailed to companies on February 24, 2004. Many thanks to all of you that responded! This information will help the license fee restructure workgroup (comprised of industry members and DOH staff) to determine if using total acreage as a basis for a license fees is a viable option. This process was initiated at the industry's request, and any restructure options will be presented to industry members for consideration and comment. If you have questions, please contact Jan Jacobs at (360) 236-3316 or e-mail [jan.jacobs@doh.wa.gov](mailto:jan.jacobs@doh.wa.gov).

The Department of Health (DOH) will present the next shellfish HACCP class April 29 & 30, 2004 in Tumwater at 7171 Cleanwater Lane, Bldg 6 (two buildings down from the Shellfish Programs office location). The registration fee is \$75 per person. Advance registration is required; registration and payment must be received by April 19. As space is limited, registrations will be accepted in order of date received (priority will be determined by postmark). *This class is intended for owners and employees of DOH-licensed molluscan shellfish operations. Persons interested in HACCP for other seafood products probably should attend a more general class.*

For more information please contact Richard Lillie at (360) 236-3313 or e-mail richard.lillie@doh.wa.gov.

## Shellfish HACCP Class Registration April 29 & 30, 2004 Tumwater, Washington

Participant(s):

Name \_\_\_\_\_ Title \_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_

Shellfish operation \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone number \_\_\_\_\_ Fax number \_\_\_\_\_

Registration check enclosed for \$ \_\_\_\_\_ (\$75 per person).

Make check payable to **DOH Shellfish Programs** and mail with completed registration form to:.

**Shellfish Programs HACCP Class  
PO Box 47824  
Olympia, WA 98504-7824**

Advance registration required by **April 19, 2004**.

### Staff Contacts

Jennifer Tebaldi  
Office Director ..... (360) 236-3325

Bob Woolrich  
Classification/WaterQuality ..... (360) 236-3329

Jessie DeLoach  
Licensing & Certification ..... (360) 236-3302

Dave Gifford  
Biotoxins ..... (360) 236-3074

General Information ..... (360) 236-3330

### Other Numbers

General Information ..... (360) 236-3330

FAX ..... (360) 236-2257

Web address ..... [www.doh.wa.gov/ehp/sf](http://www.doh.wa.gov/ehp/sf)

### ***Biotoxin Closures***

PSP Hotline ..... (800) 562-5632

PSP Web ..... [www.doh.wa.gov/ehp/sf/biotoxin.htm](http://www.doh.wa.gov/ehp/sf/biotoxin.htm)

PSP Maps ..... [www.doh.wa.gov/biotoxinmaps.htm](http://www.doh.wa.gov/biotoxinmaps.htm)

### ***Growing Area Maps***

..... [ww4.doh.wa.gov/gis/growingareas.htm](http://ww4.doh.wa.gov/gis/growingareas.htm)



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ALWAYS WORKING FOR A SAFER AND  
HEALTHIER WASHINGTON